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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,490	07/22/2002	Soojin Kim	9766-US-212	2915
31561	7590	03/23/2004	EXAMINER	
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE 7 FLOOR-1, NO. 100 ROOSEVELT ROAD, SECTION 2 TAIPEI, 100 TAIWAN			VO, HAI	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

Office Action Summary	Application No.	Applicant(s)	
	10/064,490	KIM, SOOJIN	
	Examiner	Art Unit	
	Hai Vo	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-12 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8 and 10-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Objections

1. Claims 7, 8 and 12 are objected to because of the following informalities: It appears that the claims are related to a composite structure comprising a sheet structure as defined in claims 1 or 2 and a base material, not the sheet structure itself as described in the claims. Further, it is noted that in view of the present amendment, an adhesive is preferably coated on the thermally fused open cell foamed layer or the base in a dot-scattered manner. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. Claims 1, 2, 4, 6, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lasman et al (US 4,017,656) in view of JP 08-232174. Lasman teaches an imitation leather material having a layer construction as follows: imitation leather-like surface 24, thin urethane skin 12, high density foam layer 14, lower density foam layer 16, hot melt adhesive layer 18 and a woven fabric base 20 (figure 1). Lasman teaches the lower density foam layer having a density of 5.8 lbs/gal or a specific gravity of 0.7, within the claimed range (column 6, lines 60-61). Lasman discloses that the two foam layers are dried and cured (column 6, lines 40-65). Lasman teaches the urethane skin being cast on an embossed transfer sheet in order to impart the embossed designed onto the surface of the urethane skin (column 3, lines

23-30). Lasman does not specifically disclose the emboss pattern having a convexo-concave shape. JP'174 however, teaches the artificial leather comprising a woven base 1, a porous layer 2 and a film layer 5 filled only in concavities formed on the porous layer, a transfer paper 9 having a convexo-concave shape reverse to a leather-like convexo-concave surface (abstract, [0016], [0018], figures 1-4). JP'174 discloses that the formation of the convexo-concave pattern is to provide the sheet structure with a leather-like irregular surface (abstract), which is important to the expectation of successfully practicing the invention of Lasman, thus suggesting the modification. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the transfer sheet having a convexo-concave shape reverse to a leather-like convexo-concave surface motivated by the desire to provide the sheet structure having a leather-like irregular surface.

4. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lasman et al (US 4,017,656) in view of JP 08-232174, as applied to claim 1 or 2 above, as evidenced by Nishibayashi et al (US 3,939,021). Lasman does not specifically disclose the cell size of the foam layer. Nishibayashi is relied as evidence that teaches a leather-like sheet material comprising an open cell polyurethane foam layer having a cell size within the claimed range (example 1, table 4-continued). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use employ the porous layer

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having a cell size instantly claimed motivated by the desire to provide the leather-like sheet material having smooth surface and an appearance similar to leather.

5. Claims 7, 8, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lasman et al (US 4,017,656) in view of JP 08-232174, as applied to claim 1 or 2 above, as evidenced by Higgs et al (US 3,661,674). Lasman does not specifically disclose the porous layer being bonded to the woven base by an adhesive applied in the form of spots. Higgs is relied on as evidence that teaches a leather-like sheet material comprising a foam layer, and a woven base layer being bonded to the foam layer by a polyurethane adhesive applied in the form of spots (column 3, lines 40-45, example VI). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the adhesive in the form of spots to bond the porous layer and the woven base together motivated by the desire to control the amount and distribution of the adhesive, further controlling the degree of permeability of the leather-like sheet material.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-4, 6, 10 and 11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,114,260 in view of Lasman et al (US 4,017,656). Claim 1-10 of Patent No. 6,114,260 disclose the sheet structure comprising a layer construction as recited in the claims except the thermally fused open cell foamed layer interposed between the porous layer and the supporting fabric layer. Lasman teaches an imitation leather material having a layer construction as follows: imitation leather-like surface 24, thin urethane skin 12, high density foam layer 14, lower density foam layer 16, hot melt adhesive layer 18 and a woven fabric base 20 (figure 1). Lasman teaches the lower density foam layer having a density of 5.8 lbs/gal or a specific gravity of 0.7, within the claimed range (column 6, lines 60-61). Lasman discloses that the two foam layers are dried and cured (column 6, lines 40-65). Lasman teaches the urethane skin being cast on an embossed transfer sheet in order to impart the embossed designed onto the surface of the urethane skin (column 3, lines 23-30). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the multiple foam layers instead motivated by the desire to provide a sheet material with additional padding.
8. Claims 7, 8 and 12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,114,260 in view of Lasman et al (US 4,017,656), as applied to claim 1 or 2 above,

as evidenced by Higgs et al (US 3,661,674). U.S. Patent No. 6,114,260 does not specifically disclose the porous layer being bonded to the woven base by an adhesive applied in the form of spots. Higgs is relied on as evidence that teaches a leather-like sheet material comprising a foam layer, and a woven base layer being bonded to the foam layer by a polyurethane adhesive applied in the form of spots (column 3, lines 40-45, example VI). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the adhesive in the form of spots to bond the porous layer and the woven base together motivated by the desire to control the amount and distribution of the adhesive, further controlling the degree of permeability of the leather-like sheet material.

Response to Arguments

9. Applicant's arguments with respect to claims 1-4, and 7-8 have been considered but are moot in view of the new ground(s) of rejection.
10. The art rejections over JP'174 have been overcome by the present amendment.
JP'174 fails to teach or suggest a sheet structure comprising a thermally fused open cell foamed layer formed on the porous layer.
11. The art rejections over Lasman et al in view of Katabe et al have been overcome by the present arguments (the second full paragraph at page 11 of the 01/21/04 amendment).
12. The 112 claim rejections have been overcome by the present amendment and response.

Conclusion

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on M,T,Th, F, 7:00-4:30 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hai Vo

HV